3-1. Scope

This chapter describes the ISM full cost methodology, cost mapping, funding, billing procedures and performance metrics for establishing and maintaining ISM operations. MACOM installations, Depots, USARC, and ARNG will utilize this policy and guidance for operations.

3-2. References

- a. DFAS Regulation 37-1, Defense Finance and Accounting Service Indianapolis Center, Sept 18,1995.
- b. Department of Defense Instruction (DODI) Number 4000.19, Subject: Inter-Service and Inter-governmental Support; Army Reimbursable Policy, 19 May 1995.
- c. SAFM-BUR MSG DTG 211530ZDEC95, Subject: Revisions To The Army Reimbursement Policy.
- d. DALO-SMP MSG DTG261457ZDEC96, Subject: International Merchant Purchase Authorization Card (IMPAC) Rules.

3-3. Cost Mapping

a. General

- (1) ISM cost mapping is an essential step towards establishing an ISM activity. If the Army is to remain combat ready during periods of reduced resources, decision-makers must recognize the financial impacts of their decisions. The ISM initiative relies on full cost knowledge to give National, Regional, and Local Managers an accurate assessment of these decisions. Accurate cost figures are essential in making repair/buy decisions, determining training impacts, allocating workload, inventory reduction and conducting "what-if" analyses.
- (2) Current Army supply, maintenance, and accounting management information systems (MIS) make it difficult to accurately track sustainment maintenance costs. DA DCSLOG required development of a full cost methodology to ensure unit commanders know the total impact of maintenance decisions on their installations and unit readiness. DA DCSLOG chartered the LIA (SLA) to develop an ISM full cost mapping procedure.
- (3) The U.S. Army Cost and Economic Analysis Center (CEAC) has approved ISM cost methodology as the basis for expanding all cost relative to direct hours expended. This cost mapping procedure identifies and captures essential categories of the full cost of doing business under the ISM management structure.
- (4) Installations, states, or DA activities (i.e., depots) operating under the Army Working Capital Fund (AWCF) financial system, with a fully burdened rate established in accordance with AMC policy, do not require ISM cost mapping.
- (5) ISM installations, states, and activities are required to update their current fiscal year cost maps annually. The ISM Corporate Board is responsible for approving the methodology used by the MACOMs for determining the full cost of doing business IAW applicable DA, DFAS & DOD Regulations. Updating cost maps is the MACOMs responsibility in coordination with AMC. Cost maps are updated in accordance with paragraph 3-3 h.

b. Methodology

- (1) The Army took a classical cost accounting approach to full job order cost construction for ISM. The Defense Manpower Data Center (DMDC) in Monterey, California, working with the Army Budget Office (ABO) was heavily involved in developing unit costs and cost-per-output for AWCF (formerly known as the Defense Business Operations Fund) requirements. Although they were MACOM focused (AMC, TRADOC and USAR), these techniques seemed appropriate for use in ISM.
- (2) This methodology was developed and refined in close coordination with DMDC, the ABO and Directorates of Resource Management (DRM) at the ISM activities during the proof of principle and demonstration phases during the ISM concept test.

HQ, AMC was consulted to ensure the methodology was consistent with their requirements and procedures and included the appropriate elements of cost as contained in the Defense Depot Maintenance Council's Cost Comparability Handbook

c. Limitations

- (1) The most significant limitation is the design of the Standard Army Financial System (STANFINS). STANFINS records obligations. Over the fiscal year, most of these obligations are expensed against operations. At this time, analysts or managers are unable to realistically measure cost performance using STANFINS. The rates used in the ISM program are carefully staffed with installation resource and maintenance managers to refine the MIS source data to accurately reflect expenses.
- (2) Depreciation, MACOM overhead, and the DOD surcharge required of AMC activities are not included as expenses. The rationale for omitting depreciation expense is that valuation of capital assets would require a significant effort beyond the objectives of testing ISM. In addition, installations are not permitted to accrue, or use, a capital reserve account. It seemed unreasonable to include depreciation as an expense when the installation could not benefit from it.

d. Objective

The objective is to account for all elements of resource (EOR) of cost at a rate designed to place the maintenance activity in a "break even" position at the end of the fiscal year. Essential costs are categorized as direct, indirect, and general and administrative expense. Definitions of these essential costs are as follows:

- (1) Direct Costs Direct costs are those clearly associated with production of a specific output. These generally include "wrench turning" and inspection labor in addition to the parts used to effect the repair.
- (2) Indirect Costs Indirect costs are those clearly associated with creation of productive capacity, but which cannot be related to any specific job. Examples of these costs include bench stock, general operating supplies, and supervisory or clerical personnel.
- (3) General and Administrative Expenses (GAE) GAE are those expenses clearly associated with providing services to the entire population of an installation. Expenses for police and fire protection, road and ground maintenance, personnel services, and childcare are essential to community operations but cannot be attributed to any specific activity or process.

e. Data Sources

- (1) Installation accounting reports and CEAC data are used to develop cost map data elements. It is important to remember that STANFINS, the only source of official accounting data, was not designed, or intended to operate, as a cost accounting system. STANFINS records obligations in accordance with fiscal rules established by law and Army Regulation. It does not record expenses as they occur, as does an accrual accounting system.
- (2) The lack of archived data at installation level is also a constraint. ISM installations without mainframe computers are unable to provide historical accounting data at the level of detail desired. This limitation should be overcome by the STANFINS replacement system currently under development by Defense Finance and Accounting Service (DFAS).
- (3) The lack of electronic access to accounting data has resulted in manual and spreadsheet operations in a few cases, placing an additional workload on installation resource management personnel. However, close coordination with installation DRM ensures the most accurate cost figures possible.

f. Cost Map Development

Cost maps are developed for each ISM activity. Each map presents a full cost, break even rate for that particular maintenance operation. A sample cost map is attached as enclosure 3-1. A cost map survey is attached as enclosure 3-2.

(1) The first step in cost map development is to review the modified table of organization and equipment (MTOE) or the Table of Distribution Allowance (TDA) of the maintenance activity to identify the direct and indirect labor. Job titles are used to identify

direct and indirect labor positions; i.e., repairers, welders, mechanics, and inspectors are considered direct labor, while command, supervisory, contract administration, and support personnel are indirect labor. Authorized strength is used for computations to avoid the fluctuations integral to using on board strength. Once this has been completed, the second step is computing the following cost elements for establishing the maintenance activity fully burdened rate:

(2) <u>Direct Military and Civilian Labor Cost Computations</u>

- (a) Military Personnel Cost Computation Military personnel costs are computed using CEAC data. These figures include all benefits and retirement costs. CEAC uses required TOE figures to compute personnel costs; therefore, these figures are adjusted to reflect the actual cost for the authorized strength of the specific unit being analyzed. For example, CEAC base strength for a maintenance company is 241 with an annual cost of \$8,676,180. Average salary is \$35,980. This average salary was applied to the authorized strength of each unit involved to determine total military personnel costs. (The average military salary is updated annually with the publication of the CEAC Cost Factors Handbook).
- (b) Direct Labor Cost Computation Direct Labor costs are computed by applying the percentage of the TDA authorized strength or funded work-year ceiling, whichever is being utilized by the Installation Resource Management Office, performing "wrench turner" tasks, to the unit annual personnel costs. Inspectors are considered direct labor to maintain consistency with Joint Depot Maintenance Advisory Group practices. Indirect labor is computed by applying the percentage of command, supervisory and support personnel to the annual personnel costs. Labor expenses are taken from STANFINS data by EOR for civilians, and from CEAC data, as described above, for military personnel.
- (c) Indirect Cost Computation Other indirect costs are extracted from STANFINS data using cost mapping protocols developed for the specific unit or function being analyzed. These cost maps are similar to those used by DMDC to develop Unit Cost Reports at installation level in the areas of training and recruiting. While DMDC's focus is at the Installation and MACOM level, they use cost maps developed by the ABO to compute Indirect and GAE costs for these functions. In this connection, both ABO and DMDC have informally reviewed the ISM process and found it consistent with their efforts. The ISM full cost development process uses the Army Management Structure Code (AMSCO) to extract cost data relative to the specific activity for all EOR. In some cases, Account Processing Codes (APC s) are used to identify the costs of specific military units since more than one unit is included in a mission AMSCO. Repair part costs are identified by the EOR 4th position and subtracted from the total operations costs since they are direct costs to a specific repair and are passed directly to the owning activity. The remaining indirect costs are summed with indirect labor to give total indirect costs.
- (d) GAE Computation GAE are computed using the base support AMSCOs from the FY XX Army Budget Office data call. Based on discussions with Installation Resource Managers, all Base Support AMSCOs from the data call are included in the cost computation. Expenses are allocated based on the measures of consumption specified in the Army Data Call. (AMSCOs are updated based on DA Pam 37-100-XX when published).
- (e) Productive Hours Available Computation Productive hours available are the number of total direct labor personnel authorized, multiplied by the standard for annual productivity. Standards (and Sources) for annual productive hours are: Military Labor, 1040 hours (AR 750-1); U.S. Government Civilian Labor, 1740 hours (AR 540-6) and Contract labor as specified in contract or by COR.
- (f) Hourly Rates Computation Dividing the applicable total direct labor, indirect costs, and GAE by the productive hours available to the maintenance activity develops hourly rates. The sum of these is the hourly rate the activity shall charge in a full cost recovery environment.

g. Rates

(1) Fully Burdened Rate (FBR) [Note: Used for Bid Evaluations and Cost Benefits Only.] - The fully burdened hourly rate is developed using the cost map and computations described above and reflect the break-even rate, assuming labor efficiency at the billable (productive) hour standard. This rate is applied to every direct labor hour of each job and added to parts costs for that job to compute the full cost of performing that specific task. In a full cost environment this would be the price an activity would have to charge the customer to earn sufficient income to pay its operating expenses. The FBR is used solely for bid evaluation and calculating the benefits to the efficiency. It cannot be used for billing purposes.

(2) Reimbursable Rate - The reimbursable rate is defined in DFAS Regulation 37-1. For reimbursable customers, this rate is calculated by the installation/state DRM resource analyst and will be equal to the billing rate authorized in DFAS Regulation 37-1. This rate is to be used for customer billing.

h. Cost Map Updating

- (1) Cost maps for all activities must be updated annually in conjunction with Fiscal Year closeout. This includes any changes in the standards published in the regulations or pamphlet referenced in the above paragraphs. Installation and ARNG DRMs will update maintenance activity cost maps using the base cost map survey, in accordance with the current ABO fiscal year financial regulations and guidance provided by HQ AMC. Annual updates will be submitted as directed by HQ AMC NLT the end of the current fiscal year.
- (2) Installations using DCAS/SABRES software for financial accounting without local modifications can provide a copy of the obligation file(s) for both the operating costs and GAE on 3.5 inch floppy disk(s). Cost mapping personnel will load the data and extract the pertinent information for producing the cost map.
- (3) All cost maps, prior to general distribution, are provided to the installation/activity for verification and concurrence. The verification process is paramount to the production of accurate cost maps. Once the verification process is complete, a copy will be on file at the NSMM office to verify that the installation or states fiscal year rate has been updated. Installations or activities having major organizational restructuring must have their cost map updated to reflect any changes in the cost of doing business.
- i. <u>Cost Map Summary</u> These procedures reflect managerial accounting standards for cost development in the ISM business environment. Establishing fully burdened rates allows managers to accurately compare alternative repair/buy options, compete sources of repair on a level field, and track budget execution. Costs, operational efficiencies, and billing rates are critical components of the decision making process in making sound business decisions which support the intent of the ISM efficiency. These components will be reviewed and analyzed to determine cost savings and required actions to insure sound business practices. Managers must understand rate development and cost performance.

j. Cost Map Survey

(1) The Cost Map Survey (Enclosure 3-2) has two distinct sections. Section I covers the data which is submitted on a onetime basis for the entire installation, regardless of the number of MAs being cost mapped. Section II is directly related to each activity being cost mapped. Therefore, the data on those pages is submitted for each MA. The initial and last pages are constructed for installations to "fill in the blanks" with responses. For the remainder of the survey, information is derived from the Legacy reporting system and attached either in hard-copy printout or provided on a floppy disk. List and briefly describe any obligations that are one time costs and funded by other than the installation budget. Example: one time cost of installing fiber optic cables, funded by a signal command. This information assists in developing a more accurate hourly rate. Pay special attention to Object Classes 25, 26 and 31. Contract costs in Object Class 25, which are directly passed to the customer, are listed as shown on the survey, including a brief description. Example: painting vehicles and aircraft by a contractor. Repair parts costs are not included in the hourly rate development. Consequently, for Object Classes 26 and 31, identify the costs of parts as accurately as possible. Repair parts purchased via a credit card are normally not included in the costs reflected in either element of resources (EOR) 26* or 31* when the fourth character of the EOR is A, Q, S, 5, 6 or 7. If possible, cost data for repair parts purchased by credit card should be entered as a single line entry to the data requested in paragraph 5 of the survey. Installation/State must ensure that the response identifies a principal POC for the submission. POC's for further assistance are the NSMM office, Ms Jolene Boddorf, DSN 793-4624, commercial (309) 782-4624 or Mr. Tim Bucklaw, DSN 793-3896, commercial (309) 782-3896.

3-4. Financial Performance Metrics

The ISM program has two basic financial performance measurements. These metrics are Cost Savings and Cost Avoidance. This section defines these metrics and provides the formula for each.

- a. <u>Cost Savings</u> Cost savings represent the repair efficiencies in terms of labor, repair parts, and shipping costs (and reduced buys from wholesale) that may result from assignment of RX repairs to a Center of Excellence (COE). It is a maintenance production-based analysis that describes the savings that result from maintenance performed at a COE when compared to the historical cost of the owning installation in obtaining a similar, serviceable item, during a baseline period, usually the previous fiscal year. Historical and COE average costs include the resources expended for both repaired items and items that were washed out, as well as shipping costs (two ways), where applicable. Historical and COE labor costs are computed using a fully burdened labor rate.
- (1) Cost Savings Formula Cost Savings are the Total of "repair efficiencies" and "net buy cost avoidance", which are computed as follows:
 - (a) If the installation has a repair history for the item being repaired, then use the formula illustrated in figure 3-1.

Quantity repaired by the COE * [(historical repair cost + two-way transportation cost, if the historical period was during ISM) - (COE repair cost + two-way transportation cost)]. The resulting value is labeled "repair efficiency".

Figure 3-1

(b) If the installation has no repair history for the line being repaired, then use the formula in figure 3-2.

Quantity repaired by the COE * [net buy cost - (COE repair cost + two-way transportation cost)]. The resulting value is labeled "net buy cost avoidance".

Figure 3-2

- (2) Frequency of Report Cost savings are calculated monthly based on the prior month's production by the COE. Production data is taken directly from EMIS and is computed off-line by the RSMM/TSMM Resource Analyst using the formula shown above and using a standardized report template. The initial report product is validated within the RSMM/TSMM and with the LSMMs to ensure that any variances between legacy system data and EMIS data are resolved prior to official release. The monthly is released NLT 45 working days following the end of the production month. The quarterly Cost Savings report is released 45 working days following the end of the production fiscal quarter.
- b. <u>Cost Avoidance</u> Cost avoidance represents the savings to the installation supply activity (Retail Stock Fund or Army Working Capital Fund) compared to the potential costs the supply activity would have incurred in a baseline period, usually the previous fiscal year. It uses a demand-based analysis that describes the aggregate savings that result from a combination of factors; reduction in costs to repair at the COE and improvements in meeting demands through sustainment maintenance repair rather than purchase from the national level supply system. In other words, it compares the manner in which requirements (demands) were satisfied in the current period to how the same total requirements would have been satisfied during a baseline period. Ideally, the demand should reflect the total demand placed on the installation stock fund (RSF or AWCF) for the quarter. In practice, this value has been obtained from several different sources, including Central Demand Database (CDDB), SAILS Demand History File, SAILS Transaction Register, and SARSS-O wholesale issue/COE production history. As SARSS-O is fielded, the objective source of demand history will be the recurring net demands placed on the SARSS-O Retail Stock Fund box.
 - (1) Cost Avoidance Formula Cost avoidance is computed using the formula in figure 3-3.
- (2) Frequency of Report Cost avoidance is calculated quarterly based on the prior quarter's total demand and production by the COE. Currently, CDDB data is not available until approximately 45 days following the quarter close date. Therefore, production of the Cost Avoidance Report by the RSMM Resources Analyst will not be performed before that date. Internal RSMM validation and staffing with the LSMMs occurs prior to official release date, which will be 135 working days after the close of the production quarter.

c. <u>Other Performance Measures</u> The reporting requirements described in this paragraph do not preclude use of other locally or regionally developed measures. However, the performance of the ISM program will be measured at the national level by the metrics defined above,

with the Cost Savings metric representing the "repair efficiencies" only, and the Cost Avoidance metric representing the aggregate "Sustainment Cost Avoidance".

(Historical Total Buy Cost + Historical Total Repair Cost + Transportation Cost) - (Non-COE Total Buy Cost + COE Total Repair Cost + Transportation Cost)

Formula Legend:

Historical Total Buy Cost = (Portion of Demand that is Historically Bought) x (Net Buy Cost)

Net Buy Cost = AMDF Price (1 - Credit rate)

Portion of Demand that is Historically Bought = (Demand) x (Portion of Demand that is Historically Repaired)

Portion of Demand that is Historically Repaired = (Demand) x (Historical Repair Proportion)

Historical Repair Proportion = (Historical Repair Quantity) / (Historical Demand Quantity)

Historical Total Repair Cost = (Portion of Demand that is Historically Repaired) x (Historical Average Repair Cost)

Historical Average Repair Cost = [Sum of All (Historical Parts Cost + Historical Labor Cost)] / Historical Repair Quantity

Non-COE Total Buy Cost = Portion of Demand that is Not Repaired at COE

Net Buy Cost portion of Demand that is Not Repaired at COE = Demand Quantity Repaired at COE

COE Total Repair & Trans = (COE Total Repair Cost + COE Total Trans Cost)

COE Total Repair Cost = (COE Total Parts Cost + COE Total Labor Cost)

COE Total Trans Cost = COE Total Packing & Crating Cost to Repair Installation + COE Total Shipping Cost to Repair Installation + COE Total Packing & Crating Cost From Repair Installation + COE Total Shipping Cost From Repair Installation

Figure 3-3

3-5. Financial Management Operations

- a. The LSMMs and AMMs are responsible for coordinating funding and billing with their DRMs. Military Interdepartmental Purchase Requests (MIPRs) will be used to reimburse the repair and transportation costs between Installations, States, and AMC Integrated Materiel Management Center (IMMC) until system changes are in place to handle billing transactions between locations. {DFAS is currently working Engineering Change Proposals (ECPs) for Standard Army Retail Supply System (SARSS), Standard Army Financial Inventory Accounting and Reporting System (STARFIARS), and STANFINS}. The Standard Army Intermediate Level Supply System (SAILS) or SARSS will provide both supply management support and the interface to the STARFIARS/STANFINS.
- b. The RSMM will be provided a copy of all MIPR actions within the geographic region. The NSMM will be provided a copy of all MIPR actions for National work.

3-6. Funding

- a. <u>Operations and Maintenance Army (O&MA)</u> The O&MA funds the stock requirements for both consumable and reparable secondary items, including depot-level and GS reparable items. O&MA Base Operations Support (BASOPS) (Direct Appropriation) funding currently pays for direct labor in the DOL maintenance shops.
- b. <u>Operations and Maintenance Army Reserve (OMAR)</u> The OMAR funds the USAR stock requirements for both consumable and reparable secondary items, including depot-level and GS reparable items. OMAR BASOPS (Direct Appropriation) funding currently funds direct labor in the DOL maintenance shops.
- c. <u>Operations and Maintenance National Guard (OMNG)</u> The OMNG funds the ARNG stock requirements for both consumable and reparable secondary items, including depot-level and GS reparable items. OMNG funds direct labor in the DS/GS maintenance shops. ARNG does not participate in the retail AWCF. They purchase directly from wholesale.

d. Army Working Capital Fund (AWCF)

- (1) Wholesale The wholesale portion of the AWCF (formerly Wholesale Stock Fund) is a revolving capital fund designed to finance the Army supply pipeline. It purchases supplies from approved sources, sells those supplies to its customers, and uses the proceeds to buy more supplies. The wholesale AWCF finances the repair of wholesale Class IX assets at depots, installations, ARNG, USAR, and contractor facilities.
- (2) Retail The retail AWCF (formerly Retail Stock Fund) is a revolving capital fund designed to finance the supply pipeline between the user and wholesale. It funds the purchase of supplies from wholesale, sells them to customers, and then uses the proceeds to buy more supplies. The retail AWCF owns and manages installation stocks. (The ISM program conducts repairs for the retail AWCF and is not a repair and return program to Operations and Maintenance, Army (OMA) customers.)

3-7. Repair Cost

Under the current ISM policy of repair and return to owning organization, the designated COE installation will bill authorized repair costs and return transportation costs to the owning installation using the reimbursable rate. The costs are comprised of the following:

- a. Repair Parts Defined as the actual cost of the parts derived from the completed maintenance requests.
- b. Packaging and Crating Cost determined from the actual costs of packaging for each work order. If the cost is not known use the guidance found in DFAS Regulation 37-1.
- c. Transportation Costs annotated on the government bill of lading (GBL) or contracted carrier.
- d. Direct Labor Direct labor is defined as direct labor hours billed for the ISM repair. The "billing" direct labor hours are derived from the completed maintenance requests. The direct labor reimbursement rate for each installation or work center, multiplied by the direct labor hours, will be used for determining the direct labor cost. The maintenance shop reimbursable labor rates will be provided by the LSMM to the RSMM/TSMM annually (current FY/1Q) for updating records and publication, as required. In the case of the Army National Guard (ARNG), the direct labor reimbursement rate will include the direct labor reimbursement rate, plus any additional indirect costs that are incurred above which they are currently funded. For ARNG Combined Support Maintenance Shop's (CSMS), direct labor will be the sum of direct labor plus 25% of indirect costs. For ARNG Mobilization and Training Equipment Site (MATES), direct labor will be the published ISM Cost Map direct labor IAW DFAS Regulation 37-1.

3-8. Reimbursement Billing Procedures

- a. This section describes billing procedures used with the ISM program. All regional repair work will be performed on a reimbursable basis consistent with all applicable Army & DFAS Regulations. ISM activities will bill actual repair costs.
- (1) Direct Military Cost Computations Charge direct military labor based on the actual hours worked or assigned. Charge full time assignments using composite rates. Otherwise, an hourly rate of 1/2080 of the composite rates will be used and a leave and holiday factor of 14% of pay cost added. Military fringe benefits will be recouped by the application of a percentage surcharge of military pay or costs and billed as part of direct labor reimbursement costs as directed in DFAS Regulation 37-1, Chapter 37-23.
- (2) Direct Civilian Labor Cost Computation Direct civilian labor is normally not reimbursable within the Army unless performed by an Army Working Capital Fund (AWCF). Activities that receive direct funding for services may not be reimbursed for services which they are funded. However, if an activity conducts additional services over and above the direct funded mission, those services may be provided on a reimbursable basis. Civilian labor performed will be charged at the actual direct labor reimbursement rate, multiplied by the number of actual hours worked or assigned IAW DFAS Regulation 37-1, Chapter 37-22.
- b. ISM Reimbursable Cost (IAW paragraph 3-7)

- (1) Active Component (AC) will reimburse to AC, (parts, transportation, packing and crating).
- (2) AC will reimburse to USAR, (parts, transportation, packing and crating).
- (3) AC will reimburse to ARNG, (direct labor + indirect cost factor (paragraph 3-8.d), parts, transportation, packing and crating).
 - (4) USAR will reimburse to AC, (parts, transportation, packing and crating).
 - (5) National Training Center (NTC) will reimburse to AC/USAR/ARNG (labor, transportation, parts, packing and crating).
- (6) USAR will reimburse to ARNG, (direct labor + indirect cost factor (paragraph 3-8.d), parts, transportation, packing and crating).
- (7) ARNG will reimburse to AC & USAR, (direct labor, parts, transportation, packing and crating). [Note: The ARNG does not go to the AWCF for requirements; they go directly to wholesale]. Therefore, all reimbursements from the ARNG to AC & USAR will be referred to as a direct OMA repair and return program. Cost savings and avoidance for this exception will be included in the calculations of ISM metrics.]
- (8) ARNG will reimburse to ARNG, (direct labor + indirect cost factor (paragraph 3-8.d) parts transportation, packing and crating).
- (9) AC/USAR/ARNG will reimburse W/S AWCF (i.e., Depots, ESSC), (labor, parts, transportation, packing and crating). For AMC maintenance contracts, reimbursements will be determined by the appropriate AMC contracting officer.
- (10) National Inventory Control Points (NICPs) will reimburse to AC/RC, (labor, parts, transportation, storage, packing and crating).
 - (11) USAR will reimburse USAR (parts, transportation, packing and crating).
- (12) NMTC will be reimbursed as follows: Parts, mandatory replacement parts per TM necessary for complete rebuild for training, plus parts required from inspection; supplies other than Class IX required during disassembly and assembly; disposal of waste products, waste oil, fuel, and hydraulic fluid; supplies required for test and evaluation, fuel, oil, and coolant; packing and crating including material required for refurbishing wooden containers and materials for metal containers i.e. air valves, seals, and desiccant. Costs for training soldiers will be borne by a separately funded appropriation.

c. Billing

- (1) Regional Work Reimbursement of repair work completed for other installations will be accomplished using MIPRs using the following procedures:
 - (a) Compile the authorized repair costs.
 - (b) Attach the completed maintenance requests.
- (c) Identify the LSMM DRM POC. The billing documentation will be submitted by the LSMM/AMM to the RM POC NLT the 20th working day of the following month.
 - (d) Send copies of the maintenance requests to the owning installation RM.
 - (e) Coordinate with the owning installation's RM when the funds allotted on the MIPRs are nearly spent.
- (f) Determine year-end close out cutoff dates by each installation's year-end guidance. Bill work in progress, upon completion, to the new fiscal year funds.

- (g) Refer to Chapters 4, 5, and 9 for more information concerning Regional Programs.
- (2) National Work Reimbursement of repair work completed for AMC MSCs or other national customers will be done via MIPRs using the following procedures:
 - (a) Prepare a MIPR for repair cost using the installation/state reimbursable rate.
- (b) Forward the MIPR to the customer repairing installation resource manager POC and furnish a copy to the NSMM and RSMM/TSMM national work managers.
 - (c) Provide a transportation fund site to the customer.
- (d) If a repaired item exceeds 30 days storage based on the weekly report provided by the repairing activity, the IM may negotiate and provide additional funds. The additional handling and storage costs are charged to the existing MIPR.
 - (e) Refer to Chapter 6 and 9 for more information concerning National Programs.

Enclosure 3-1		Samp	le ISM Cost Map			
DOL, MAINT DIVIS FORT SAMPLE, N.						
Installation Data: military pers civilian pers total pers auth sq ft occupied Organization Data Personnel (C/M) Sq Ft Occupied	15,011 2,436 18,802 8,000,222 129/0 195,670	Orgn Factor 0.0000 0.0739 0.0085 0.0250		Date: Analyst	9-Jul-96 E. Moscatelli	
Category	Cost	Cost Basis	Allocation Measure	Factor	Allocation	Rate per Hour
Labor Wages Benefits Temporaries Total Labor	\$4,500,000 \$1,234,500 \$787,500 \$6,522,000	180	Authorized/Temps			
Billable Hours Direct Indirect		Army Std 141 39	1740hrs/yr	1,740 0.7833 0.2167	245,340 \$5,108,683 \$1,413,317	\$20.82 \$5.76
Operating COSTS 21 22 23 24 25 26 27 28 29 30 31 32 43 Total Operating Less Rep Parts Billable Oper GAE	\$32,000 \$10,100 \$0 \$0 \$619,600 \$5,200,500 \$0 \$0 \$0 \$0 \$52,500 \$0 \$0 \$5,914,700 \$3,792,700 \$2,122,000	EOR		1.0000	\$2,122,000	\$8.65
96A 96BA 96BB 96BC 96BD 96C 96DA	\$0 \$0 \$121,600 \$3,857,300 \$1,599,000 \$768,000 \$118,600		sq ft mil mil ttl ttl ttl	0.0250 0.0000 0.0000 0.0085 0.0085 0.0085	\$0 \$0 \$0 \$32,787 \$13,592 \$6,528 \$1,008	

			FULL		\$42.90
			1		
TOTAL GAE				\$1,881,845	\$7.67
	\$2,699,300	mil	0.0000	\$0 ¢1,001,045	
90 117719.2			0.0085		
90 90	\$3,119,800 \$1,190,900	ttl	0.0085	\$20,518 \$10,123	
95	\$13,492,000	ttl	0.0085	\$26,518	
56Z	\$39,074,000 \$13,492,000	sy ii ttl	0.0250	\$976,670 \$114,682	
78	\$39,074,800	sq ft sq ft	0.0250	\$22,275 \$976,870	
76L1	\$1,155,300 \$891,000		0.0085	\$9,820 \$22,275	
96W 96Y	\$2,095,000 \$1,155,200	ttl ttl	0.0085 0.0085	\$17,808 \$9,820	
96U	\$1,906,500	ttl	0.0085	\$16,205	
96TE	\$0 \$1,007,500	mil	0.0000	\$0 \$17, 205	
96TD	\$354,100	ttl !!	0.0085	\$3,010	
96TB	\$0	ttl	0.0085	\$0	
96TA	\$414,100	ttl	0.0085	\$3,520	
96S5	\$156,700	mil 	0.0000	\$0	
96S4	\$0	mil 	0.0000	\$0	
96S3	\$104,100	mil 	0.0000	\$0	
96S2	\$94,300	mil 	0.0000	\$0	
96S1	\$54,900	mil	0.0000	\$0	
96SQ	\$0	ttl	0.0085	\$0	
96SP	\$32,400	ttl	0.0085	\$275	
96SN	\$0	ttl	0.0085	\$0	
96SM	\$273,900	ttl	0.0085	\$2,328	
96SL	\$1,365,600	ttl	0.0085	\$11,608	
96SK	\$348,500	ttl	0.0085	\$2,962	
96SJ	\$781,800	ttl	0.0085	\$6,645	
96SI	\$0	ttl	0.0085	\$0	
96SH	\$2,511,800	mil	0.0000	\$0	
96SG	\$0	ttl	0.0085	\$0	
96SF	\$0	ttl	0.0085	\$0	
96SE	\$163,900	ttl	0.0085	\$1,393	
96SD	\$120,300	ttl	0.0085	\$1,023	
96SC	\$0	ttl	0.0085	\$0	
96SB	\$60,400	ttl	0.0085	\$513	
96Q	\$0	ttl	0.0085	\$0	
96P	\$2,424,000	ttl	0.0085	\$20,604	
96N	\$3,277,200	ttl	0.0085	\$27,856	
96M	\$12,761,800	sq ft	0.0250	\$319,045	
96J	\$4,574,000	sq ft	0.0250	\$114,350	
96H	\$530,400	mil	0.0003	\$0 \$0	
96GF	\$300	ttl	0.0085	\$3	
96GE	\$0	mil	0.0000	\$0 \$0	
96GD	\$782	mil	0.0000	\$0	
96GC	\$1,355,600	CİV	0.0739	\$100,179	
96GB	\$114,500	mil	0.0000	\$4,02 <i>1</i> \$0	
96GA	\$544,300	ttl	0.0085	\$4,627	
96F	\$2,954,500	mil	0.0000	\$0 \$0	
96E	\$250,500	mil	0.0000	\$0 \$0	
96DD	\$275,100	mil	0.0003	\$3,240 \$0	
96DC	\$616,500	ttl	0.0085	\$5,240	
96DB	\$994,000	ttl	0.0085	\$8,449	

BACKUP COMPLITATIONS

MEASURE		
TTL STR		\$41,073,700
MIL STR		\$9,868,482
SQ FT		\$57,301,600
CIV		\$1,355,600
TOTAL GAE		109,599,382
ALLOCATIONS:		
TTL	0.0085	\$349,126
MIL	0.0000	\$0
SQFT	0.0250	\$1,432,540
CIV	0.0739	\$100,179
TOTAL GAE		\$1,881,845
ALLOCATED		

Enclosure 3-2	Sample Cost Map Survey
Section I	
(a) INSTALLATION:	
(b) INSTALLATION DATA: (Data	is for the prime installation only.)
	OTAGE: (Total Square Footage of buildings [Admin, Shops, Maintenance, Warehouses, etc.] nclude Family Housing, Covered Storage, or AmmunitionSq. Ft.
	D STRENGTH: (Total authorized strength based on MTOE's and TDA's, include Tenant NAF Personnel). [If personnel funding ceilings dictate Government civilian personnel strength liling strengths.] Military: Government Civilian:
Environmental Compliance (PE-56 Services (PE-79); and BASOPS(-) applicable Program Elements and 53.Z0: Environmental C 54.Z0: Pollution Prevent 56.Z0: Environmental C 76.L: Minor Construction 1. Alterations 2. Alterations 3. Alterations 3. Alterations 4. Railroads 4. Railroads 5. Surfaced Al 6. Other Non-7. Hospital an 79: Real Property Service JO. Operation Mo. Municipa 96.A: Leases (Total .AA 96.B: Installation Supply A. Military Clo B. CIF/CIIP C. Other Supply D. Director of 96.C: DS/GS Maintenar Costs for Organiza	ATIVE EXPENSE: [Environmental Conservation (PE-53); Pollution Prevention (PE-54); 6); Minor Construction (RPM) (PE-76); Maintenance and Repair (RPM) (PE-78); Real Propert (PE-96)] Provide the Total Obligations (Direct and Automatic Reimbursable) for each of the I Functional Account Extensions. onservation (Total) tion (Total) ompliance (Total) ompliance (Total) ompliance (Total) ompliance (Total) ompliance (Total) on (RPM) (By Functional Account Extension listed below) and Minor Construction, Active Facilities and Minor Construction, Hospital & Medical Buildings and Minor Construction, Commissaries Repair (RPMA) (By Functional Account Extension listed below) on the sease Building Facilities of Medical Buildings cases (By Functional Account Extension listed below) of Of Utilities (Total J1 through J6) of Utilities (Total J1 through J6) of Utilities (Total J1 through J6) of Utilities (Total J1 through J7) of Utilities (Total J7) through J8) of Operations (By Functional Account Extension listed below) of Operations (By Functional Account Extension listed below) of Operations

D. HHG

- 96.E: Laundry and Dry Cleaning Services
- 96.F: Army Food Service Program (Total .FA through .FF only)
- 96.G: Personnel Support (By Functional Account Extension listed below)
 - A. DPCA
 - B. Alcohol/Drug Program Activities
 - C. CPO Activities
 - D. Military Personnel Activities
 - E. Garrison Army Bands
 - F. Other Personnel Support
- 96.H: Unaccompanied Personnel Housing (Total .HA through .HC only)
- 96.J: Operation of Utilities
- 96.M: Municipal Services
- 96.N: Command Element, Special Staff, HQ Commandant (Total .NA through .ND only)
- 96.P: Automation Activities
- 96.S: Community and Morale Support Activities (By Functional Account Extension listed below)
 - B. Sports Above Intramural
 - C. Bowling
 - D. Info, Travel, Recreation
 - E. Arts & Crafts
 - F. Golf
 - G. Remote Site Programs
 - H. Army Sports Programs
 - I. Entertainment
 - J. Community Support
 - K. Libraries
 - L. Outdoor Recreation
 - M. Auto Crafts
 - N. Clubs
 - P. Recreation Centers
 - Q. Bowling Alleys (under 12 lanes)
 - 1. Youth Development Programs
 - 2. Youth Leisure and Social Recreation Services
 - 3. Youth Physical Fitness and Sports
 - 4. Youth School Age/Latch Key
 - 5. Youth Services Program and Facilities Management Base
- 96.T: Preservation of Order/Counterintelligence Operations (By Functional Account Extension listed below)
 - A. Director/Chief Provost Marshall and Administrative Staff
 - B. Preservation of Order Activities
 - D. Security and Counterintelligence Operations
 - E. Correction of Military Offenders (CONUS)
- 96.U: Resource Management Operations (Total .UA through .UC only)
- 96.W: Contracting Operations
- 96.Y: Records Management, Publications

ADDITIONALLY:

- 19.00: Child Development Services (CDS) (Total .20 through .27 only)
- 90.00: Audiovisual and Visual Information Production, Acquisition and Support
- 95.00: Base Communications

LIST OF ONE TIME CONTRACT COSTS FUNDED BY OTHER THAN THE INSTALLATION:

96.M: Demolition of Real Property, Funded by Corps of Engineers

90.00: Fiber Optics Cabling, Funded by a Signal Command

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(f) ORGANIZATION/ACTIVITY TO BE COST MAPPED: (example: DOL, Maint (Ground), Fort XXXXX)	
(g) AUTHORIZATION DOCUMENT: (Provide a current copy of the organization/activity personnel portion of document. If a Personnel Funding Ceiling is being observed, provide a list of positions by Job Title)	MTOE or TDA

(h) SQUARE FOOTAGE OCCUPIED: (Administrative, maintenance and storage buildings only; no covered storage, hard stand, parking areas, runways or roads)

> Shop: _____sq ft Admin: _____sq ft Storage: sq ft

- (i) AMSCO(s): (List all AMSCOs against which this activity may obligate funds)
- (j) APC(s): (List all APCs applying to the organization/activity to be cost mapped)
- (k) PERSONNEL COSTS:

Total Obligations (Direct and Automatic Reimbursable) are required for all Object Classes. (Include 96.C Obligations) Salaries: Automatic Object Class 11 Object Class 14

Object Class 16

(I) ORGANIZATION/ACTIVITY _____

Direct Benefits: Automatic Object Class 12 Object Class 13 Object Class 15 Object Class 17

(m) OPERATING COST:

Require Object Class with total obligations (Direct and Automatic Reimbursable) listed separately by AMSCO.

Examples: AMSCO OBJE	CT CLASS	DIRECT	AUTOMATIC	
20 20	20 21	\$1,234,556 \$ 36,695	\$2,330,457 \$ 1,333	1
20 20	25 26	\$6,780,800 \$4,567,899	\$3,456,789 \$1,234,687	
20 96.C	20	\$ 245 \$3,576,778	\$ 34 \$4,555,333	
96.C	21	\$ 0	\$ 1,452 	

96.C	43	\$ 222	\$ 343

For Object Class 25 Total Obligations identified in paragraph 3, above, identify support contracts where costs are directly passed to customer (i.e. painting helicopters).

Example:

20 \$400,004 Painting Helicopters

(n) ORGANIZATION/ACTIVITY _____

For Object Classes 26 and 31 Total Obligations identified in paragraph 3, above, list Total Obligations for EOR 26*A, 26*Q, 26*S, 26*S, 26*S, 26*S, 26*S, 31*S, 31*S, 31*S, 31*S, 31*S.

Examp	les:	Direct		Automatic
20	26AA		\$100,567	\$ 11,231
20	26AQ		\$ 45,676	\$ 0
20	26EA		\$ 24,456	\$ 0
20	31FA		\$ 3,233	\$ 785
96.C	26AA		\$234,989	\$ 3,111
96.C	31G7		\$ 23,099	\$ 0

Credit Card expenditures for Repair Parts: \$40,987